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Mixed Methods Design: Examining Secondary Teachers' Perceptions about the Efficacy of First Year Implementation of the Collins Writing Program on Students' Academic Performance on State Mandated Tests

by

Barbara A. May

Edd Program

Drexel University

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Abstract

The Common Core State Standards Initiative explains that a key purpose of writing is to communicate clearly (Common Core State Standards, 2017). This study aims to determine the efficacy of, and the teachers' perceived efficacy of, the first year implementation of the Collins Writing Program at the high school level. The research combines findings from the research site, state standards, and School Performance Profile (SPP) and investigates the Literature Keystone exam scores of matched cohorts before and after the implementation of the program. While predominately a quantitative study, semi-structured interview with a minimum of teachers surveyed will provide insights to the richness of the experience or areas for improvement.

Aim

This research study serves to investigate potential changes in the scaled scores earned at the research site's administration of the Literature Keystone exams, pre- and post-implementation of the Collins Writing Program.

Problem and Purpose

Previously, the research site experienced a declining trajectory in its literature scores on the state mandated exam, resulting in a non-characteristic School Performance Profile (SPP) score during each of the last four years. This nonequivalent, quasi-experimental, mixed methods study will examine the relationship of how and to what extent the first year implementation of the CWP, effects the scaled scores of grade 10 students on the state mandated, standardized tests in a selected school district in the State of Pennsylvania. This problem warrants additional research as other school districts may be seeking similar treatments to address their declining scores and may turn to CWP.

Research Questions

Quantitative Question: To what extent does the Collins Writing Program effect the scaled scores of the grade 10 matched pairs on the state standardized and mandated end of course Keystone Language Arts Exam from testing year 2014-2015 to the testing year of 2015-2016?

Qualitative Question: How do Grade 10 English teachers describe their perceptions about the Collins Writing Program's implementation and instructional changes to classroom practice?

Proposed Methods

A mixed methods sequential design is deemed best suited for this study because “the basic assumption is that the use of both quantitative and qualitative methods, in combination, provides a better understanding of the research problem and questions than either method by itself” (Creswell, 2012, p. 552). With that in mind, the quantitative data will help the researcher explain the impact of the Collins Writing Program implemented to answer the first question. The

use of both quantitative and qualitative data yields the best perspectives for determining answers to the second question.

Participant selection will come from the archived grade 8 PSSA scores housed on campus. The researcher will use the PA secure ID of the students in grade 8 during the 2012-2013 and 2013-2014 school years, respectively. Through using the PA Secure ID to drill down by defining characteristics and determine statistically similar students. From there, a process of deriving matched pairs follows to arrive at a purposive sampling (Creswell, 2012). Another phase is conducted via teacher surveys and interviews. The researcher forgoes traditional statistical controls and, instead, must rely on a pre- and post-test design. For pre-test purposes, the researcher will use the end of course Keystone literature exam scores of the Grade 10 students from the academic year of 2014-2015 who were taught in the language arts curriculum prior to implementation of Collins Writing Program. The second group of grade 10 students is from the year 2015-2016. These students receive instruction by teachers in a post adoption of the Collins Writing Program. Through a post-test review, the researcher will use the grade 10 Keystone language arts exam of the matched pairs.

Because these are matched pairs through a process of characteristics, the results will yield more reliable data than if the classes were compared via a t-test to determine likeness. The researcher will use a two-tailed t-test of the two cohort groups. The purpose for a two-tailed test is that the researcher does not want to assume, but rather determine the extent that the Collins Writing Program has a statistically significant, positive effect on student performance, as measured by the end of course Keystone Literature exam. The cohorts are arranged as follows:

<u>COHORTS</u>	Below Basic		Basic		Proficient		Advanced	
	Male	Female	Male	Female	Male	Female	Male	Female
Grade 10 language arts instruction received 2014-2015	1	2	3	4	5	6	7	8
Grade 10 language arts instruction received 2015-2016	9	10	11	12	13	14	15	16

<u>COHORTS</u>	White	Black	Hispanic	Asian	Multi
	Grade 10 language arts instruction received 2014-2015	17	19	21	23
Grade 10 language arts instruction received 2015-2016	18	20	22	24	26

Reliability of the PSSA assessment is continually monitored against and correlated within similar ranges of prior administrations of the PSSA tests. This data is interpreted and reported across the same administration and compared to prior year’s assessments. The validity ranges from 71% to 93% within year comparison, while the across-year range is from high 60’s to low 80’s (PDE, 2010). In addition, the Pennsylvania State Board tries diligently to minimize ethnic and gender differentials by addressing the item construct –irrelevant variance. PDE recently commissioned a study to assess the tests’ items, statistical relationships, and validity (PDE, 2010). This data is significant because the PSSA’s are used to determine the matched pairs for the rest of the study.

The second part of the study involves teacher perceptions regarding the effectiveness of implementing the CWP. A short survey of 10 questions developed and administered in 2007 by the Minneapolis, Minnesota public schools will be repeated with the teachers of this research site to “evaluate the effectiveness...based on the teachers’ perceptions...of their own teaching practice and...students’ writing performance” (Collins, 2015, p. 10). The instrument evolved through a partnership between Dr. Collins, Collins Education Associates (Collins, 2015), and the Minneapolis public schools coupled with review of previous studies and literature reviews.

Using the same instrument demonstrates the same perceived issues regarding implementation faced by any district who adopts curricular change.

Follow up to these responses will be semi-structured interviews with at least 2 grade 10 English teachers who implemented the CWP through the various phases of the curriculum. A possible unmeasured source of change may be attributed to the implementation of CWP by the other core and elective teachers.

Research Implications and Significance

The process of learning to write and express ideas in a manner that can be understood by others is recursive and cyclical. One of the underpinnings of the CWP program is frequent writing and publishing. An extension of this research would be the investigation of how the use of texting and use of textisms influence students' abilities to express themselves. It is the students' awareness of phonemes that create the textisms, such as "GR8" to represent "great." Most students publish hundreds of times daily, another pillar of the CWP, via social media platforms. The idea of a possible relationship between the frequent informal writing and standardize testing would benefit from exploration.

If the CWP is able to improve the writing abilities of the students, then the research garnered through this study can address the deficit identified through the research streams in the literature review. 1) Role: The cultural and historical role of education is to produce independent thinkers who are also writing proficient learners. Evolution often sparks the role to be redefined or reexamined. 2) Process: The process of writing begins with language acquisition expressed through symbols on paper undergoing drafting, editing, and publishing steps. Practicing writing increases the ability of expression through significance of frequency. 3) Reform: This is government driven, cyclical response to social and economic changes. Accountability drives

change in the form of school improvement initiatives focused on student achievement. 4) Evolution: The emerging practices in education are designed to leverage academic change. From change comes the renegotiation of acceptable standards, known as curriculum, across the global perspective.

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Author Biography

Barbara May has worked in the field of education for over 20 years and in multiple states, with the majority of time spent at Fort Hood, Texas, and Lebanon, Pennsylvania. She has served as a teacher of students identified as Talented and Gifted, a Campus Instructional Specialist to

mentor new teachers to Killeen Independent School District that serves Fort Hood, a Curriculum Director, and an Assistant Principal. She earned her Master of Education degree from Tarleton State University, part of the Texas A&M University System, in 2001. Shortly after moving to Pennsylvania, she began her studies at Drexel University in the EdD program of Educational Leadership and Management in Administration. Barbara is looking forward to her final defense in the next five months. She has arrived at this point with the support, help, and guidance of many talented mentors through the School of Education at Drexel.